| 3 DATA INPUT INTO CODIS | Page 1 of 7 |
|--|-------------------------------|
| CODIS OPERATING POLICIES AND PROCEDURES MANUAL | Amendment Designator: 3B |
| | Effective Date: 7-August-2006 |

3 DATA INPUT INTO CODIS

3.1 General Information

- 3.1.1 DNA analysis results, generated by the STaRCall program, will be entered into CODIS either by the IMPORT program or via manual entry. For the Central Laboratory, the data entered into CODIS will be immediately available for searching at SDIS upon entry. For the regional laboratories, the data entered will be immediately available for searching at the local level; however, the data must be uploaded before it is available for searching at SDIS.
- 3.1.2 For STR data entered into CODIS via the IMPORT program, the output file created from the STaRCall program must be in the Common Message Format (CMF). Each file to be imported into CODIS should have a unique file name to ensure that the correct file is imported into CODIS.
- 3.1.3 To ensure the accuracy of manually entered data, the CODIS software requires that the allele values for all specimens be entered twice for each locus.

3.2 Profiles of Convicted Offender Specimens and Arrestee Specimens

- 3.2.1 Profiles of **Convicted Offender specimens** and **Arrestee specimens** will be configured for entry into CODIS using a unique DNA sample number. In addition, the appropriate specimen category for that specimen must be selected.
 - 3.2.1.1 Profiles of Convicted Offender specimens from juveniles shall have the specimen category of "Juvenile". Profiles of Convicted Offender specimens from adults shall have the specimen category of "Convicted Offender".
 - 3.2.1.2 Profiles of Arrestee specimens from juveniles shall have the specimen category of "Juvenile Arrestee". Profiles of Arrestee specimens from adults shall have the specimen category of "Arrestee".
 - 3.2.1.3 Upon written notification to the State System Administrator from the DNA Data Bank Supervisor of a conviction for an individual, an Arrestee specimen will be converted to a Convicted Offender specimen by changing the specimen category. This conversion will be performed by the State System Administrator or designee.
 - 3.2.1.4 An Arrestee specimen will be deleted from CODIS upon written notification to the State System Administrator from the DNA Data Bank Supervisor of a status change for the individual, such as a conviction reduced to a misdemeanor or charges dropped. Such deletions are done pursuant to the Code of Virginia.
 - 3.2.1.5 The "Source ID" field is not required to be marked for Convicted Offender and Arrestee specimens.
- 3.2.2 Profiles of Convicted Offender and Arrestee specimens are typically entered into CODIS via the IMPORT program. A specimen will <u>not</u> typically be entered into CODIS until results from all CODIS core loci are obtained.

3 DATA INPUT INTO CODIS Page 2 of 7 Amendment Designator: 3B CODIS OPERATING POLICIES AND PROCEDURES MANUAL Effective Date: 7-August-2006

3.3 Forensic Casework Non-Subject Profiles

The primary purpose of entering a forensic casework non-subject profile into CODIS is to identify the possible perpetrator of that particular crime for which the DNA analysis was conducted. This should be kept in mind when considering whether a profile is probative and should be entered into CODIS.

For forensic cases without a suspect or where the suspect has been eliminated, probative DNA profiles obtained from evidence that do not match submitted known samples (such as victim, suspect, or elimination samples) may be treated as non-subject case profiles and entered into CODIS.

For forensic subject cases where the primary DNA results include the suspect, other possibly probative DNA profiles obtained from items of evidence in the case that do not match any submitted known samples (such as victim, suspect, or elimination samples) may be treated as non-subject case profiles and entered into CODIS. The examiner will determine whether a profile is probative in such situations by taking into consideration such factors as the nature of the specific item of evidence and the alleged case scenario, and make an informed decision.

Forensic casework non-subject profiles may be entered into CODIS by manual entry or the IMPORT program. The process of data entry will be documented by placing the Specimen Detail Report in the case file. The accuracy of the data will be verified during the peer review process.

3.3.1 **Single Source Non-Subject Profiles**

- 3.3.1.1 For entry into CODIS, Single Source Non-Subject Profiles will begin with the FS Lab Number followed by an abbreviated description of the evidence. The specimen category of the forensic profile will be "Forensic, Unknown" and the Source ID field will be marked "No".
- 3.3.1.2 The **abbreviated description** of the evidence will be as recommended below. The description should be limited to 3 letters or less. The item number is not required in the description, but may be incorporated to aid in the specimen description. A maximum of 24 characters can be used for the specimen number in CODIS, but every effort should be made to not use all 24 characters. Recommended abbreviations are as follows:
 - Blood stains = bld
 - Vaginal/cervical swabs = vc
 - Thighs/ext. genitalia swabs = teg Underpants = ups
 - Perianal/buttocks swabs = pb
 - Anorectal swabs = ano
 - Lips/lip area swabs = lla
- Oral rinses = or
- Pubic area swabs = pa
- Sperm fraction = sp
- Non-sperm fraction = nsp

EXAMPLES: The specimen from a Central Laboratory forensic non-subject homicide case C99-10000 with a blood stain on the victim's shirt not matching the victim may be identified as C99-10000bld.

> Specimens from a Western Laboratory forensic non-subject case W99-50001 involving two perpetrators are from the sperm fraction of two semen stains on a sheet (stains A and B). Each stain is potentially associated with a different

3 DATA INPUT INTO CODIS Page 3 of 7 CODIS OPERATING POLICIES AND PROCEDURES MANUAL Effective Date: 7-August-2006

perpetrator. These specimens may be identified as W99-50001shA-sp (for stain A) and W99-50001shB-sp (for stain B).

3.3.2 Forensic Mixture Non-Subject Profiles

- 3.3.2.1 For some Forensic Mixture Non-Subject Profiles, the profile of the major contributor may be clearly discernable in the mixture. If the profile of the major contributor is deemed probative, the complete major profile portion of the mixture will be entered into CODIS as described in Section 3.3.1. Otherwise, a Forensic Mixture Non-Subject Profile will begin with the FS Lab Number followed by an abbreviated description of the evidence. Refer to Section 3.3.1.2 for recommended evidence descriptions. The specimen category will be "Forensic, Mixture" and the Source ID field will be marked "No".
- 3.3.2.2 The examiner should evaluate the profile using his/her experience in interpreting STR results (taking into account such factors as the overall number of alleles at each locus, the relative allele intensities, and the relative OD values) to determine whether that profile is appropriate for entry into CODIS.
 - 3.3.2.2.1 A forensic mixture non-subject profile is not appropriate for entry into CODIS if it is concluded that a search of this profile will result in a large number of ambiguous hits, or that such a profile will frequently become an ambiguous candidate when searches are made of non-subject case profiles.
 - 3.3.2.2.2 The examiner will evaluate the mixture profile and determine whether it is appropriate to enter the whole mixture profile, enter only those alleles clearly foreign to the victim, or not enter the profile into CODIS at all. The goal is to capture the profile attributable to the putative perpetrator. As necessary, the examiner should consult with the Local CODIS System Administrator to make this determination.
 - 3.3.2.2.3 It is recognized that some mixture profiles are simply not meaningful and therefore should not be entered into CODIS.
- 3.3.2.3 Current NDIS procedures contain a "4X4 rule" for upload of mixture profiles to NDIS. The "4X4 rule" states that a mixture profile with 3 or 4 alleles at up to 4 core loci, and no more than 2 alleles at the remaining core loci, is acceptable at NDIS.

A mixture profile exceeding the "4X4 rule" is not acceptable at NDIS; "4X4" will be placed at the end of the specimen number for these profiles. This designation will allow the State System Administrator to easily recognize these profiles as ineligible for upload to NDIS.

Although some profiles may be ineligible for upload to NDIS, they may be suitable for CODIS entry.

3.3.2.4 An option to designate a required allele is available for mixture profiles entered into CODIS. Only one required allele may be designated for each locus. This designation is made by a plus (+) after the allele.

3 DATA INPUT INTO CODIS Page 4 of 7 Amendment Designator: 3B Effective Date: 7-August-2006

The required allele designation is helpful in reducing ambiguous matches when the entire mixture profile is entered into CODIS. It will cause the search of this profile to only show match candidates that contain the designated allele at a particular locus. Candidates without that allele for that locus will not be considered a match. Additionally, the required allele designation is used in conjunction with the search stringency – it does NOT replace the search stringency.

Example: TPOX 8, 9, 11+ indicates that the 11 allele is a required allele and only candidates containing the 11 allele will be considered a match when this profile is searched. In this example, using a moderate search stringency, the only matching candidates are 11; 8, 11; 9, 11; 8, 9, 11; 8, 9, 11, X (X can be any allele).

Caution is necessary when a required allele designation is used. An important consideration is to not erroneously designate an allele as a required allele, causing the profile of the perpetrator to be missed during the search. If necessary, consult with the Local or State System Administrator regarding the use of the required allele designation and its effect on the search results.

3.3.3 Forensic Partial Non-Subject Profiles

3.3.3.1 In the context of profile entry into CODIS, a partial profile is a profile which appears to have missing alleles (possible allele dropout) at one or more of the loci where data is entered into CODIS. Partial profiles may be from a single source or a mixture of more than one contributor.

The decision to enter partial profiles into CODIS should be made with careful consideration. The examiner should consult with the Local System Administrator if questions arise about whether a partial profile is appropriate for CODIS entry.

- 3.3.3.1.1 For entry into CODIS of **Forensic Partial Non-Subject Profiles**, the Partial Profile field will be marked "Yes".
- 3.3.3.1.2 In general, a forensic partial profile with fewer than four loci that contain fewer than eight total alleles is not likely to be appropriate for entry into CODIS.

3.3.4 Forensic Non-Subject X Profiles

3.3.4.1 **X Profiles**

When searched with Moderate stringency at all loci, some forensic non-subject case profiles (such as mixture profiles, partial profiles, and profiles with homozygous results at many loci) will result in a large number of ambiguous candidate matches. However, the search stringency for such profiles may be customized for some loci to allow for a more efficient and discriminating search. Such customization of the search stringency at one or more loci will be at the discretion of the examiner in consultation with the Local System Administrator.

3 DATA INPUT INTO CODIS Page 5 of 7 CODIS OPERATING POLICIES AND PROCEDURES MANUAL Effective Date: 7-August-2006

An "X" will be placed in front of the specimen number for those profiles deemed suitable for entry into CODIS. The specimen category will be "Forensic, XZProfiles" and the Source ID field will be "No". If appropriate, the Partial Profile field will be marked "Yes".

EXAMPLE: XC99-1000vc-sp

3.3.4.2 X profiles will only be maintained at the State level (i.e., will not be uploaded to NDIS).

3.4 Forensic Casework Subject Profiles

A forensic casework profile that matches a suspect may be entered into CODIS. If the DNA results in a case indicate that only one perpetrator is involved, only the most complete forensic profile for that case matching the **perpetrator** will be entered into CODIS. Other profiles that appear to be from the same perpetrator, but are less complete, will not be entered into CODIS.

In forensic cases involving more than one perpetrator, more than one STR profile may be entered into CODIS if the probative profiles from different items of evidence are found to be consistent with different individuals.

Forensic casework subject profiles may be entered into CODIS by manual entry or the IMPORT program.

The process of data entry will be documented by placing the Specimen Detail Report in the case file. The accuracy of the data will be verified during the peer review process.

- 3.4.1 For entry into CODIS, **Forensic Casework Single Source Subject Profiles** will begin with the **FS Lab Number** followed by an abbreviated description of the evidence. Refer to Section 3.3.1.2 for recommended evidence descriptions. The specimen category of the forensic profile will be "Forensic, Unknown" and the Source ID field will be marked "Yes". If appropriate, the Partial Profile field will be marked "Yes".
- 3.4.2 For entry into CODIS, **Forensic Casework Mixture Subject Profiles** will begin with the FS Lab Number followed by an abbreviated description of the evidence. Refer to Section 3.3.1.2 for recommended evidence descriptions. The specimen category will be "Forensic, Mixture" and the Source ID field will be marked "Yes". If appropriate, the Partial Profile field will be marked "Yes". A forensic mixture subject profile is not appropriate for entry into CODIS if it is concluded that such a profile will frequently become an ambiguous candidate when searches are made of non-subject case profiles.
- 3.4.3 No forensic subject profiles will be entered into CODIS using the X configuration previously described.

3.5 Forensic Decedent Victim Profiles

The known profile from a decedent victim submitted as a reference sample which has been analyzed and sized will be entered into the Decedent Index in CODIS as described below. A profile from an alternate known sample from a decedent victim will be treated in a similar manner.

| 3 DATA INPUT INTO CODIS | Page 6 of 7 |
|--|-------------------------------|
| CODIS OPERATING POLICIES AND PROCEDURES MANUAL | Amendment Designator: 3B |
| | Effective Date: 7-August-2006 |

- 3.5.1 For entry into CODIS, the specimen number of the decedent victim profile will be the FS Lab number followed by "decv". If there is more than one decedent victim in the case, the FS Lab number will be followed by "decv" and the initials of the decedent victim. The specimen category will be "Decedent". No Source ID field is required for a decedent victim profile.
- 3.5.2 For some cases, the decedent victim profile may be inappropriate for entry into CODIS, for example, when the decedent victim is an infant. The examiner should consult with the Local System Administrator if such questions arise.
- 3.5.3 Decedent victim profiles will not be uploaded to NDIS.

3.6 Profiles of Unidentified Human Remains, Unidentified Persons, and Missing Persons

The profiles from cases involving unidentified human remains, unidentified persons, or missing persons can be entered into CODIS. The profiles of possible biological relatives of a missing person can also be entered into CODIS.

- 3.6.1 In the CODIS context, DNA profiles of unidentified human body parts/tissue and profiles of individuals (dead or alive) of unknown identity (e.g., individuals who are unwilling or unable to identify themselves) are treated similarly. For entry into CODIS, the profiles from unidentified remains and unidentified persons will begin with the FS Lab Number followed by an abbreviated description of the evidence. Refer to section 3.3.1 for recommended evidence descriptions. The specimen category of the profile will be "Unidentified Person" and the Source ID field will be marked "No". If appropriate, the Partial Profile field will be marked "Yes".
- 3.6.2 The DNA profile from Missing Persons may be the known profile of the missing individual, such as that developed from a sample in a child's previously prepared buccal/hair kit. Alternatively, the profile may be a deduced profile developed from an intimate item purported to belong to the individual, such as a toothbrush. For entry into CODIS, a missing person's profile will begin with the FS Lab Number followed by the initials of the person. The specimen category of the profile will be "Missing Person". For entry into CODIS, a deduced profile will begin with the FS Lab Number followed by the initials of the person or a description of the item. The specimen category of the deduced profile will be "Deduced Victim Known". The Source ID field is not required to be marked. If appropriate, the Partial Profile field will be marked "Yes".
- 3.6.3 For entry into CODIS, the profiles of biological relatives of a missing person will begin with the FS Lab Number followed by the initials of the person. The appropriate specimen category of the profile will be chosen from CODIS, i.e., "Biological (Mother, Father, etc.)". The Source ID field is not required to be marked.

3.7 **Staff Profiles**

The Staff Index is authorized and defined by DFS Administrative Operating Procedure (AOP) 11.

3.7.1 The Staff profiles will be maintained in a **Staff Index** in the Central Laboratory, with the specimen category of "staff". The specimen ID will be "DFS" followed by a unique number assigned by the State System Administrator or designee. The identifying information will be provided in writing to the Department's Forensic Office Manager II (CF343) in accordance

with the AOP. The Forensic Office Manager II is the only individual who will retain identifying information for the Staff Index profiles. The profiles **will not** be uploaded to NDIS.

3.8 **Deletions/Expungements of Profiles**

It is recognized that occasionally a profile that was previously entered into CODIS will need to be **deleted** or **expunged**.

- 3.8.1 Deletion of the profile from a forensic specimen that is **not** in a searchable Index will be at the discretion of the examiner who created the specimen initially. A Specimen Deletion Report is not required for such deletions.
- 3.8.2 Deletion of the profile from a forensic specimen that has been entered or uploaded into a searchable Index will be at the discretion of the examiner who created the specimen profile. A Specimen Deletion Report is required in the case file for documentation of such deletions.
 - When a forensic non-subject case profile is deleted from CODIS after a Certificate of Analysis has been issued indicating that the profile will be periodically searched, another Certificate of Analysis will be issued to notify the investigator that the profile is no longer being searched.
- 3.8.3 Convicted Offender or Arrestee specimens that have been entered or uploaded into a searchable Index may be deleted at the discretion of the DNA Data Bank Supervisor. A Specimen Deletion Report is required for documentation of such deletions.
- 3.8.4 A Court Order for **Expungement** of a profile from a Convicted Offender specimen, and written notification from the Data Bank Supervisor of the need to remove the profile of an Arrestee specimen are considered special types of specimen deletions. The System Administrator, or designee, will promptly perform the deletion, and the corresponding Specimen Deletion Report will be provided to the Data Bank Supervisor for documentation purposes. If the profile of the specimen requiring deletion has been transferred to a higher level in CODIS, the deletion will cascade to all higher CODIS levels at the next upload session.
- 3.8.5 The Department's Quality Manual (Section 13.11) addresses the **Expungement** of other records.

♦END